ART. IV.—Objects of Research in Affghanistan. By Professor Lassen, of Bonn.

[We have the pleasure to insert the following article by Professor Lassen, and which in order that no time should be lost in its circulation, we have already caused to be published in the Newspapers of this Presidency. Such communications as Professor Lassen's queries may elicit we shall be happy to publish without delay.—Eds.]

- 1. A country which has hitherto not been explored, is Kandahar and its neighbourhood; the capital of Demetrius, called by his name Demetrias, was situated in Arachosia, and it seems probable, that coins of Demetrius will be found most numerously in that part of Afghanistan, if Mr. Masson should have means for sending some qualified person there. Another class of coins might also be chiefly expected from Kandahar. Arachosia belonged, at least generally, to the empire of the Arsacidæ, who can only be supposed to have occasionally possessed parts of Kabul; Parthian coins bearing a Greek legend on one side and a Bactrian on the other, will probably have been struck only by such kings, as ruled in Kabul and its neighbourhood. Vonones (or by the native legend his son Vologases) is the only known Parthian king, from whom we have as yet coins of the above description; another name found on a coin published by Swinton is not legible; a new coin was lately edited by Mr. Millingan, having no Greek, only a Bactrian legend, evidently an Arsacidan one, though not legible. It would be of great importance to complete this Parthian series, because the chronology of the Arsacidæ might then be brought to bear on that of the Indo-Scythians.
- 2. From the country to the westward of Kabul and the sources of the Kabul river, which the Chinese call by the name of Kissin, coins of the first dynasty of Indo-Scythians may be expected chiefly, if the researches could be extended to the neighbourhood of the Lake Yarah. Segistan still bears the names of the first Indo-Scythians, who were properly called Sacæ, and their capital must have been somewhere in Drangiana. Also the Greek king Artimachus appears from one of his coins to have reigned near the Lake Yarah, and it would not be unreasonable to expect coins of him and his successors, (perhaps even Greek monuments of other kinds,) from those tracts, if made accessible.
- 3. The town Nagara, mentioned by Ptolemæus, with the Greek surname of Dionysopolis, must have been the capital of some Greek kingdom, probably of Agathocles and Pantalcon, who exhibit the symbols of Dionysos on their coins. The Chinese mention Nakoloho which is the same name, as the site of the flourishing Buddhist establishment, about 400 years of our era in the Chinese place

Nakoloho on the river Hilo, which must be the Hir found on D'Anville's maps. It would be of importance to determine the exact situation of Nagara, and to ascertain, whether the name both of the river and the ancient town are not still traceable. I suppose the Hir to be Surshud. The ruin of Nagara may be expected to yield a new harvest of Greek coins, and its neighbourhood might perhaps furnish us with Greek inscriptions.

- 4. Sultan Baber mentions a monument in Lawghan, which the Mahomedans supposed to be the grave of Lamech; the Chinese travellers passed through this country, called by them Larpho, on the road to Peshawer, from which it may be concluded, that they went to see some Buddhist monument there. Would it not be possible to get some further information of what remains still to be found in Lawghan?
- 5. Pliny mentions a town Copissa, 'destroyed by Cyrus,' in the country of the Paropomasidæ; by the accounts of the Chinese travellers Kapisa is the valley of the Gurbad river. Are no remains to be found along that river? and is the name at present quite unknown? It would be of some interest, because it might be conjectured that the name of Kapisa has some relation to the name of the king Kadphises, who on his coins spells his name in the native legend Kapissa.
- 6. The Chinese speak of a flourishing Buddhist kingdom Udjana, or Ujjana, which was situated on the western bank of the Indus and on the Sewad river, the capital was not far from the last mentioned one, and was called Mangala. As far as I know, this country has not been explored at all, and might be expected to yield coins of the dynasty ruling for several centuries there: topes might also be sought for in that neighbourhood.
- 7. Jan Messon, as well as Sultan Baber, speaks often of a river, which he calls Baran, without giving any more definite description of its course. Is this river different from the lower part of the Penjhir? or is it only the name for a part of that river?
- 8. A theory has lately been set forth respecting the topes, that they are to be regarded as dehgops, and contain relics of Buddhist saints; moreover, that the coins found in them have been placed there at different times as offerings, and consequently that the date of coins found in a tope, affords no clue to the period of its erection. Now, this theory supposes that the topes had entrances and openings, by which the coins might be inserted, and the relics taken out at certain festivals to be shown to the people, as is mentioned by the Chinese travellers of dehgops. Are there any traces of such entrances or openings in any of the topes of Kabulistan?

9. Is the dialect of the Kohistanis of Kabulistan a peculiar one, or related to the Lawghans, or that of the inhabitants of Kaferstan?

10. The Kirdhkis mentioned by Mr. Elphinstone as forming part of the population of Eastern Kabulistan, speak an Indian dialect; is this dialect nearly related to Punjab? and are the Kirdhkis to be regarded as emigrants from India in comparatively modern times, or remains of the ancient Hindu population? As far down as to the times of Mahmud of Ghazna it may be shown, that the inhabitants of Kabulistan were Indians, and most probably direct descendants of the Gurves, Ascadars and Gandars spoken of by the ancients.

ART. V.—On the detection of Arsenical Poisons by Marsh's process—
its inapplicability to the Sulphurets of Arsenic—and the mode of
obviating the fallacy occasioned by Antimonial Compounds. By
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In December, 1836, I exhibited to a large party at Government House the very beautiful process invented by Mr. Marsh of Woolwich, for the detection of minute quantities of arsenical poisons. The method consists in placing the suspected substance in very dilute sulphuric acid, and introducing a slip of pure zinc. The hydrogen is evolved in combination with the metallic arsenic, and on examination presents most distinct and remarkable phenomena. If ignited, the flame is of a leaden blue color, and diffuses a powerful odour of garlic, and a dense white smoke. If the flame be reduced to the size of a pea, and applied to the interior of a thin glass tube, a crust of metallic arsenic is formed on the tube, surrounded by a white ring of arsenious acid. To this, by a little dexterous management, the several tests for arsenic may be applied, namely the ammoniacal-nitrates of silver and copper, and the sulphuretted hydrogen gas.

A few months after the meeting referred to, I had occasion to apply the process to the examination of the contents of the stomach of the Munshi of the Coroner's Office, who had been poisoned by arsenic contained in a ball of sweetmeat. The results were quite conclusive, and were, moreover, checked by the performance of the common process on a portion of the large quantity of arsenic adherent to the mucous membrane of the stomach.

Up to the time of this occurrence, and indeed for some months later, I participated in Marsh's opinion, that this admirable process was applicable to all the arsenical poisons—to those not dissolved by water